WHAT IS CLAIMED IS:

1   1.   A disk drive comprising a rotating magnetic media having tracks identified by
2   binary codewords, wherein each track codeword for a particular track within a contiguous band
3   of tracks differs from a track codeword for an adjacent track within the contiguous band of tracks
4   by a defined number N of bits, and differs from a track codeword for a nonadjacent track within
5   the contiguous band of tracks by at least the defined number N of bits, wherein the defined
6   number N of bits is greater than four such that at least two bit errors can be corrected when
7   reading a track codeword.

1   2.   A disk drive as defined in claim 1, wherein each track codeword comprises 23
2   bits and the defined number N of bits is 7 bits.

1   3.   A disk drive as defined in claim 1, wherein each track codeword comprises 15
2   bits and the defined number N of bits is 5 bits.

1   4.   A disk drive as defined in claim 1, wherein the contiguous band of tracks
2   comprises between about 128 and 32,768 tracks.

1   5.   A disk drive as defined in claim 1, wherein the contiguous band of tracks
2   comprises about 2048 tracks.

1   6.   A method for identifying tracks on a rotating magnetic media of a disk drive,
2   comprising assigning each track within a contiguous bank of tracks with a unique binary
3   codeword such that each track codeword for a particular track within the contiguous band of
4   tracks differs from a track codeword for an adjacent track within the contiguous band of tracks
5   by a defined number N of bits, and differs from a track codeword for a nonadjacent track within
6   the contiguous band of tracks by at least the defined number N of bits, wherein the defined
7   number N of bits is greater than four such that at least two bit errors can be corrected when
8   reading a track codeword.

1   7.   A method for identifying tracks as defined in claim 6, wherein each track
2   codeword comprises 23 bits and the defined number N of bits is 7 bits.

3   8. A method for identifying tracks as defined in claim 6, wherein each track

4 codeword comprises 15 bits and the defined number N of bits is 5 bits.

5   9. A method for identifying tracks as defined in claim 6, wherein the contiguous

6 band of tracks comprises between about 128 and 32,768 tracks.

7   10. A method for identifying tracks as defined in claim 6, wherein the contiguous

8 band of tracks comprises about 2048 tracks.